

Department of Environmental Quality

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DIVISION OF AIR QUALITY Bryce C. Bird Director

GUIDELINES

TO:

NSR Permitting

FROM:

Regg Olsen, Permitting Branch Manager 3/4/14

SUBJECT:

Guidance for PM_{2.5} Offsetting Post PM_{2.5} SIP Approval

DATE:

March 6, 2014

On December 4, 2013, The Utah Air Quality Board approved the PM_{2.5} State Implementation Plan (SIP) which simply references 40 CFR 51 Appendix S (Appendix S) for offsetting requirements. The approved SIP designates SO₂, VOC and NOx as precursors to PM_{2.5}. This means new major sources or modifications to major sources, in a PM_{2.5} nonattainment area, with significant increases in PM_{2.5}, SO₂, NOx, or VOC need to obtain offsets. The Permitting Branch's February 17, 2011 interim guidance for PM_{2.5} offsetting, also based on Appendix S, did not include VOC or NOx as precursors. This guidance document has been amended to include all PM_{2.5} precursors.

Significance

The significance levels for PM_{2.5} nonattainment areas are:

PM_{2.5} SO₂ 10 tpy (Appendix S)

NOx

40 tpy (Appendix S) 40 tpy (Appendix S)

VOC

40 tpy (R3-7-403-1(4)(b))

Significant increases in PM_{2.5}, SO₂, NOx, and/or VOC require offsetting.

Interpollutant Trading

DAQ will use the same interpollutant offsetting policy currently followed for PM_{10} offsetting; offsets obtained shall be from the same regulated NSR pollutant except the primary nonattainment pollutant ($PM_{2.5}$ in this case) may be used to offset precursor pollutants (SO_2 , NOx, and VOC). This means $PM_{2.5}$ can only be offset with $PM_{2.5}$ but SO_2 , NOx, and VOC may be offset with $PM_{2.5}$.

Offset Ratio

In accordance with Appendix S, PM_{2.5} offsets for PM2.5, SO₂, NOx, and/or VOC must provide a "positive net air quality benefit" to the nonattainment area. The offset ratio is set at 1:1 with rounding up to the next full ton. For example:

With a significant $PM_{2.5}$ increase of 18.05 tpy = 18.05 X 1 (offset ratio) = 18.05 tpy, rounded up to the next full ton means 19 tpy of $PM_{2.5}$ is required to be offset.

With a significant NOx increase of 40.0 tpy = 40.0 X 1 (offset ratio) = 40.0 tpy, rounded up to the next full ton means 41tpy of PM $_{2.5}$ or NOx (or a combination of both) is required to be offset.

With a significant SO_2 increase of 41.05 tpy = 41.05 X 1 (offset ratio) = 41.05 tpy, rounded up to the next full ton means 42.0 tpy of $PM_{2.5}$ or SO_2 (or a combination of both) is required to be offset.

PM_{2.5} Emission Credit Registry

Depending on which designated PM_{2.5} nonattainment area a major source with significant increases in PM_{2.5}, SO₂, NOx, and/or emissions is located in, determines from which emission credit registry offsets can be used.

Sources requiring PM_{2.5} offsets located in the **Provo City**, **Utah PM_{2.5} nonattainment area** (Utah County) must obtain credits from the Provo City Registry.

Sources requiring PM_{2.5} offsets located in the Salt Lake City, Utah PM_{2.5} nonattainment area (includes Salt Lake County, Tooele County, Davis County, Weber County, and Box Elder County) must obtain credits from the Salt Lake City PM_{2.5} Registry.

Sources requiring PM_{2.5} offsets located in the Logan City, Utah/Idaho PM_{2.5} nonattainment area (Cache County) must obtain credits from the Logan City PM_{2.5} Registry.

This Guideline shall be audited every two years by the Major NSR Permits Manager to determine the current status and relevance of the information.